इंटरनेट मानक

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Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

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Jawaharlal Nehru
"Step Out From the Old to the New"

IS 5104 (1969): Twist Drills, Oversize Morse Taper Shank
[PGD 32: Cutting tools]

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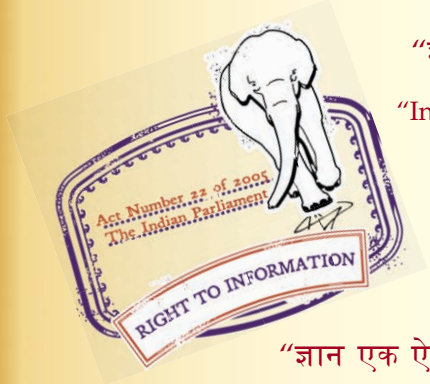

"ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है"
Bhartṛhari—Nītiśatakam
"Knowledge is such a treasure which cannot be stolen"

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AMENDMENT NO. 4 JANUARY 2003
TO
IS 5104 : 1969 SPECIFICATION FOR TWIST DRILLS, OVERSIZE MORSE TAPER SHANK

(*Page* 1, *footnote*) — Delete the footnote 'This standard conforms fully to ISO Recommendation R 235-1961

(*Page* 2, *footnote*) — Insert the words '*(first revision)*' at the end of footnote

(BP 10)

Reprography Unit BIS New Delhi India

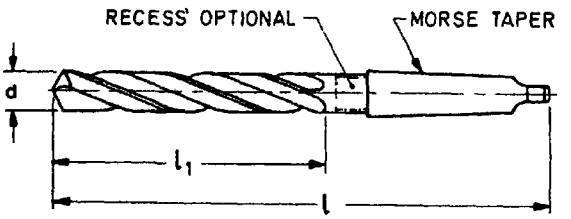
Small Tools Sectional Committee, EDC 45; Twist Drills, Reamers, Taps, Sockets, Sleeves, Adaptors Subcommittee, EDC 45:1 [Ref Doc : EDC 45(1999)]

Indian Standard

SPECIFICATION FOR TWIST DRILLS, OVERSIZE MORSE TAPER SHANK

1. Scope — Dimensions and requirements of twist drills with oversize morse taper shanks

2. Dimensions



All dimensions in millimetres

d h8	Range of Diameters d		l_1	l	Morse Taper	d h8	Range of Diameters d		l_1	l	Morse Taper
	Over	Up to and including					Over	Up to and including			
12 00 12 20 12 50 12 80 13 00 13 20	11 80	13 20	101	199	2	26 75 27 00 27 25 27 50 27 75 28 00	26 50	28 00	170	319	4
13 50 13 80 14 00	13 20	14 00	108	206	2	28 25 28 50 28 75 29 00 29 25 29 50 29 75 30 00	28 00	30 00	175	324	4
18 25 18 50 18 75 19 00	18 00	19 00	135	256	3						
19 25 19 50 19 75 20 00	19 00	20 00	140	261	3	30 25 30 50 30 75 31 00 31 25 31 50	30 00	31 50	180	329	4
20 25 20 50 20 75 21 00	20 00	21 20	145	266	3	31 75	31 50	31 75	185	334	4
21 25 21 50 21 75 22 00 22 25	21·20	22 40	150	271	3	40 50 41 00 41 50 42 00 42 50	40 00	42 50	205	392	5
22 50 22 75 23 00	22 40	23 00	155	276	3	43 00 43 50 44 00 44 50 45 00	42 50	45 00	210	397	5

(*Continued*)

This standard conforms fully to ISO Recommendation R 235-1961

Adopted 6 February 1969

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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI

d h8	Range of Diameters d		l_1	l	Morse Taper	d h8	Range of Diameters d		l_1	l	Morse Taper
	Over	Up to and including					Over	Up to and including			
45·50 46·00 46·50 47·00 47·50	45·00	47·50	215	402	5	64·00 65·00 66·00 67·00	63·00	67·00	245	499	6
48·00 48·50 49·00 49·50 50·00	47·50	50·00	220	407	5	68·00 69·00 70·00 71·00	67·00	71·00	250	504	6
50·50	50·00	50·80	225	412	5	72·00 73·00 74·00 75·00	71·00	75·00	255	509	6
						76·00	75·00	76·20	260	514	6

3. Designation

3.1 An oversize morse taper shank twist drill with 22·00 mm diameter, of 'tool type' *N* for right-hand cutting conforming to this standard and made from high speed steel (HS) shall be designated as:

Twist Drill 22 00 IS : 5104 HS.

3.2 When required with 'tool types' other than *N*, *H* or *S* should be added in the designation after the diameter as appropriate.

4. Tolerances — The flute length l_1 and overall length l may vary between the corresponding lengths specified for the preceding and the following ranges of diameters.

Example:

The flute length l_1 for 29·00 mm diameter may vary between the values 170 and 180 mm from the specified value of 175 mm.

5. General Requirements

5.1 'Tool type', unless otherwise specified: *N* according to IS : 5099-1969*.

5.2 The detailed dimensions of point and cutting angles shall be at the discretion of the manufacturer (*see also* IS : 5099-1969* for recommendations regarding 'tool types').

5.3 The diameter *d* shall be measured as near the point as practicable.

5.4 The flute length, overall length and tolerances for intermediate diameters shall be selected from the relevant range of diameters.

5.5 Other requirements to IS : 5099-1969*.

6. Tests — According to IS : 5099-1969*.

*Technical supply conditions for twist drills.

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AMENDMENT NO. 1 JUNE 1974

TO

IS : 5104-1969 SPECIFICATION FOR TWIST DRILLS, OVERSIZE MORSE TAPER SHANK

Addendum

(*Page* 2, *table under clause* 2) — Add the following note at the end of the table:

"**Note** — For 'Range of Diameters d' not specified in this standard the flute length l_1 and overall length l shall be calculated according to IS 5103 1969 'Specification for twist drills, morse taper shanks'."

(EDC 45)

Reprography Unit BIS New Delhi India

AMENDMENT NO. 2 APRIL 1979

TO

IS : 5104-1969 SPECIFICATION FOR TWIST DRILLS, OVERSIZE MORSE TAPER SHANK

Addendum

(*Page* 2, *clause* **6**) — Add the following Explanatory Note after **6**:

"EXPLANATORY NOTE

This standard was based on ISO/R 235-1961 which has been reviewed by ISO and found technically suitable for transformation into ISO 235/I-1975. Recently this Indian Standard has also been reviewed and found to be technically identical with ISO 235/I-1975 'Parallel shank twist drills, jobber and stub series, morse taper shank twist drills and core drills' issued by the International Organization for Standardization."

(EDC 45)

Reprography Unit, BIS, New Delhi, India

AMENDMENT NO. 3 DECEMBER 1996
TO
IS 5104 : 1969 SPECIFICATION FOR TWIST DRILLS, OVERSIZE MORSE TAPER SHANK

(*Page* 2, *clause* 4) — *Substitute the following for the existing clause:*

'4 **Tolerance** — *Tolerance on flute length and overall length shall be* 5 mm'

(*Page* 2 *clauses* 5.1, 5.2, 5.5 *and* 6) — Substitute IS 5099 : 1983 *for* 'IS 5099 : 1969'

(PI 10)

Reprography Unit BIS New Delhi India